



# Transformation: The 5<sup>th</sup> Dimension

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# **Objective**

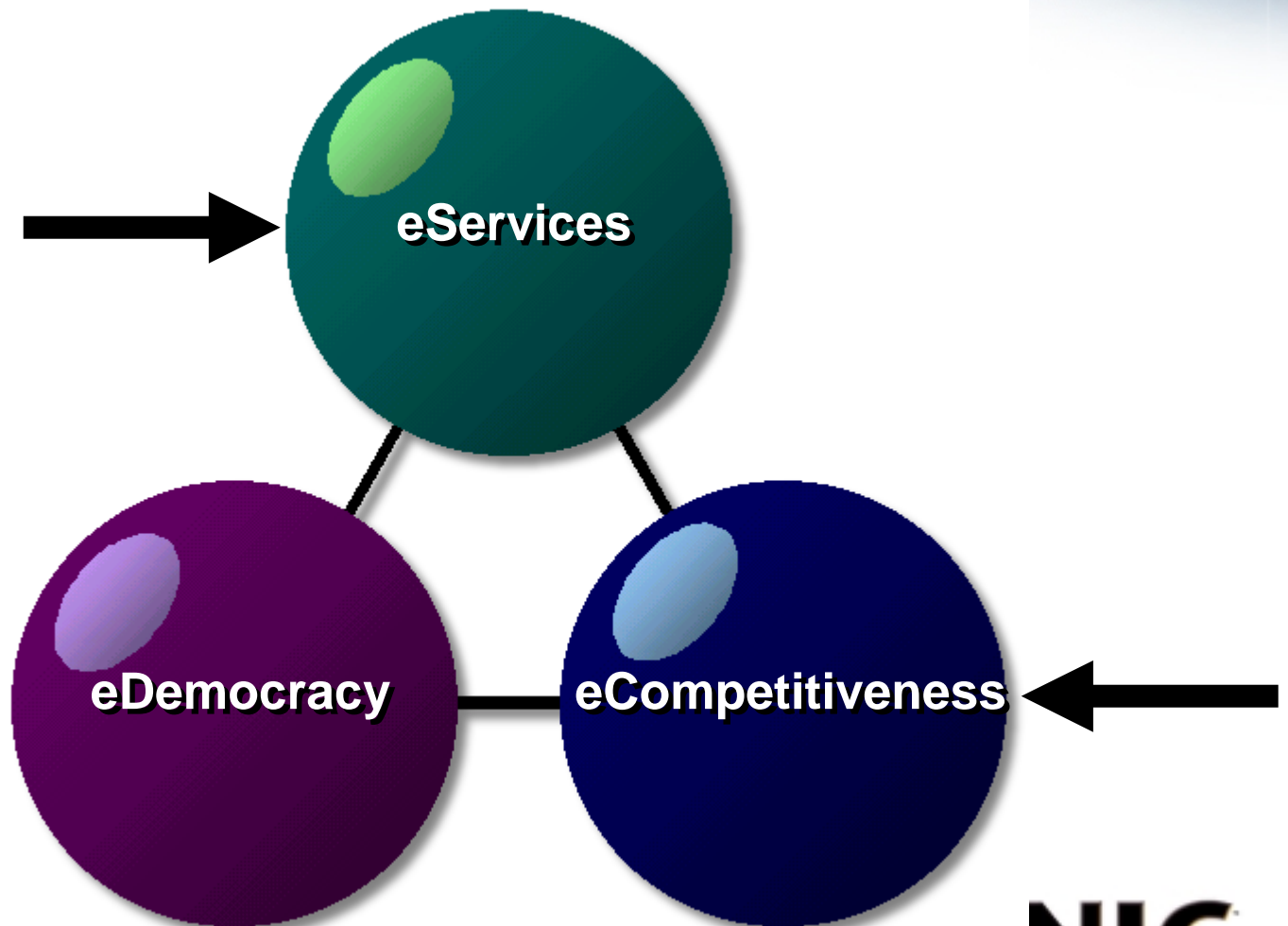
**To explore opportunities for  
transforming government and  
positioning California for  
success in the new Century**



# Agenda

- The opportunity for transformation
- 4 giga-issues
- The race results (so far)

# The Opportunity







**The eQ**

**Electronic  
Government**



COMING LIVE TO THE CREST  
EBONY FASHION SHOW  
SUN APRIL 12  
HAWAII'S APRIL SHOW  
ORE INFO - MID



**WHEN YOU PASS THROUGH THIS PORTAL**

**YOU LEAVE ALL CARES BEHIND**







# The eQ

**Digital  
Government**

**Electronic  
Government**



# The Digital Government Vision

The citizens of California are going to be better off economically ten years from now.




# Wealth Creation

- AOL
- Cisco
- Intel
- Microsoft

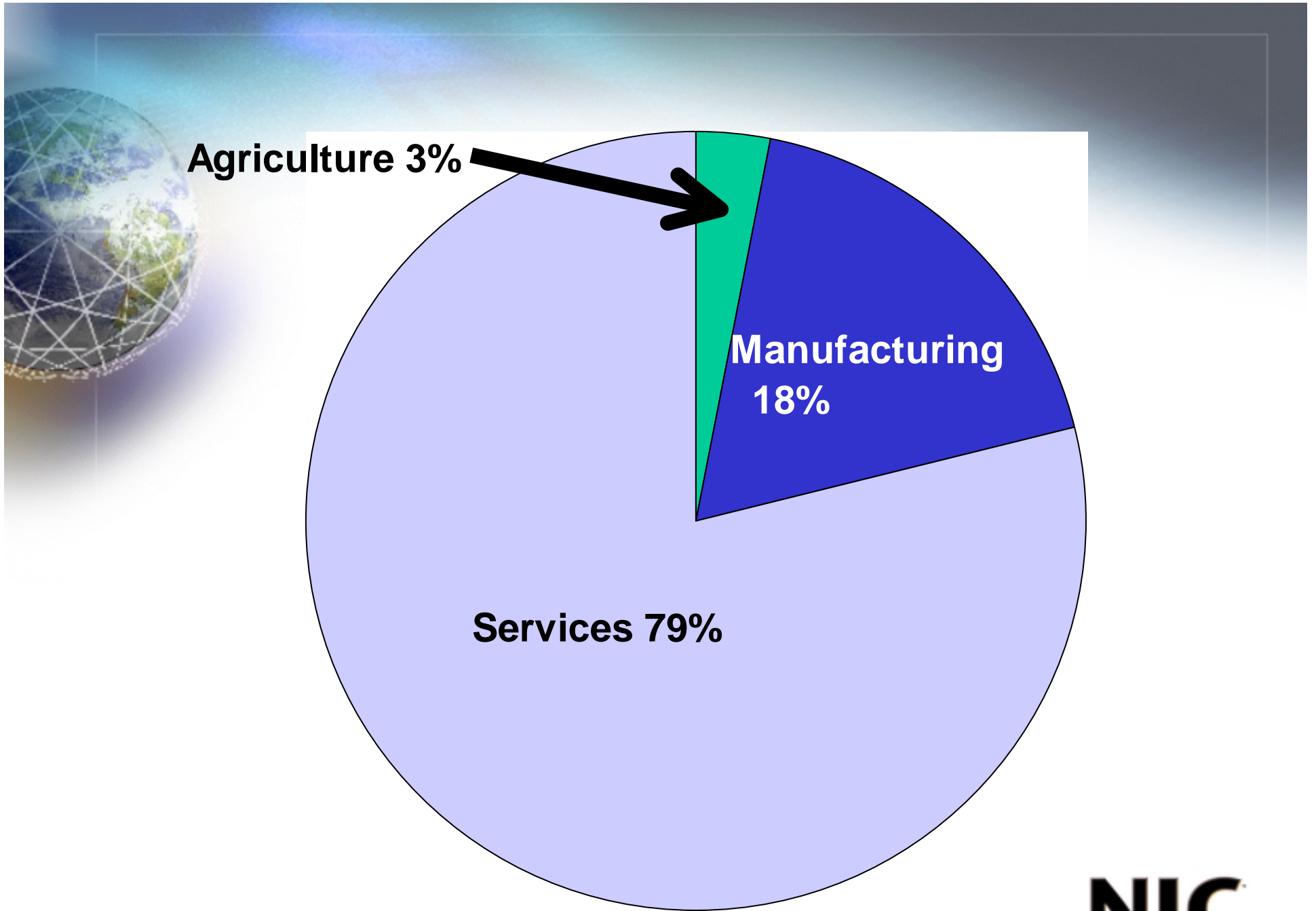
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*Value of all precious  
metals mined since the  
beginning of civilization*

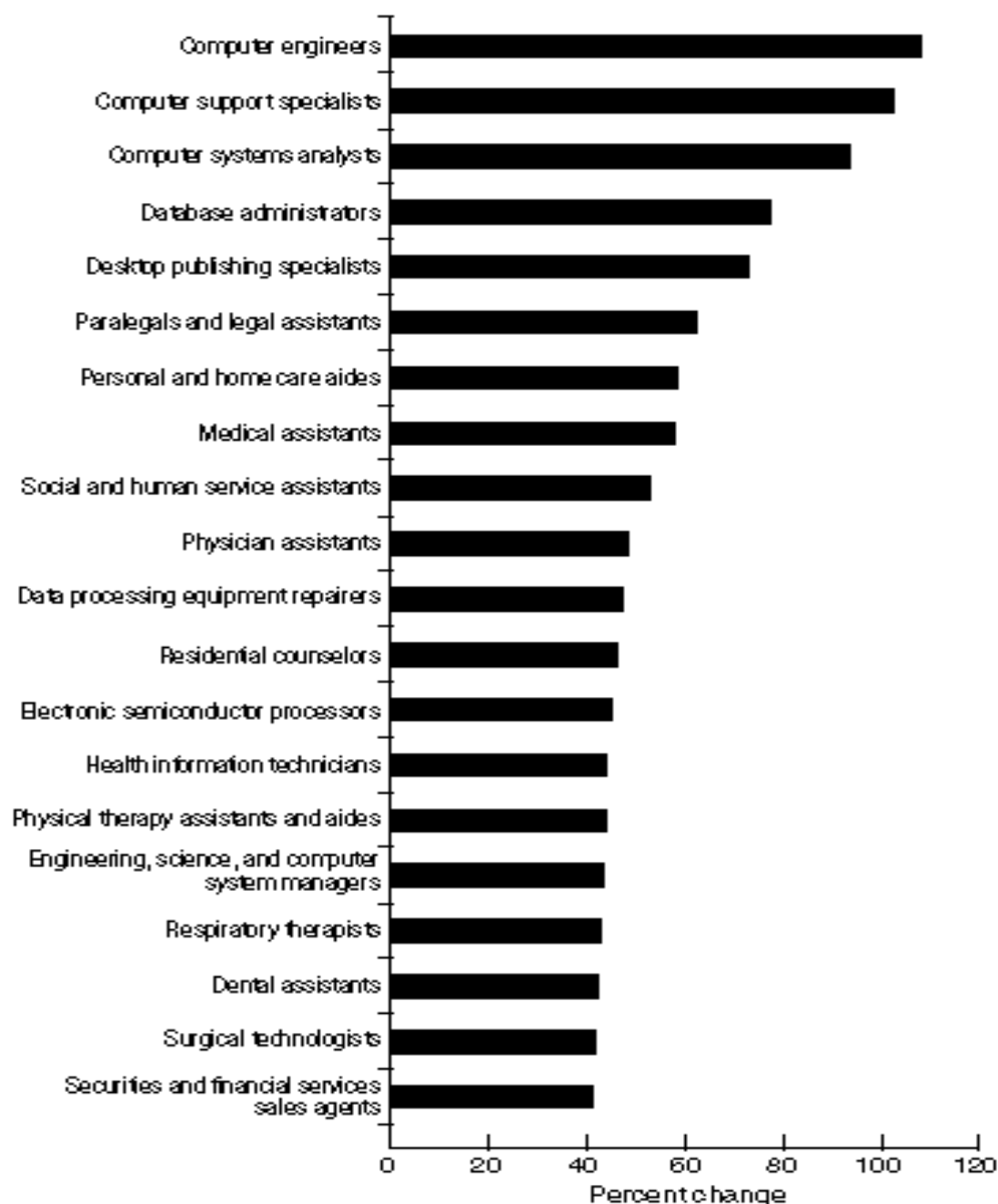
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- The economy is stuck in the doldrums, thanks largely to broken promises of technology. Dazzled by seemingly limitless returns, bankers have funded hundreds of companies, all going after the same dubious markets. Headless, individual investors clamored to get into the stock market, driving share prices to unheard-of levels. Soon, the overheated market crashed, turning the new heroes of business into goats and scoundrels. Now, disillusionment reigns, and nobody knows what is going to happen next.

Railroads in England, 1850





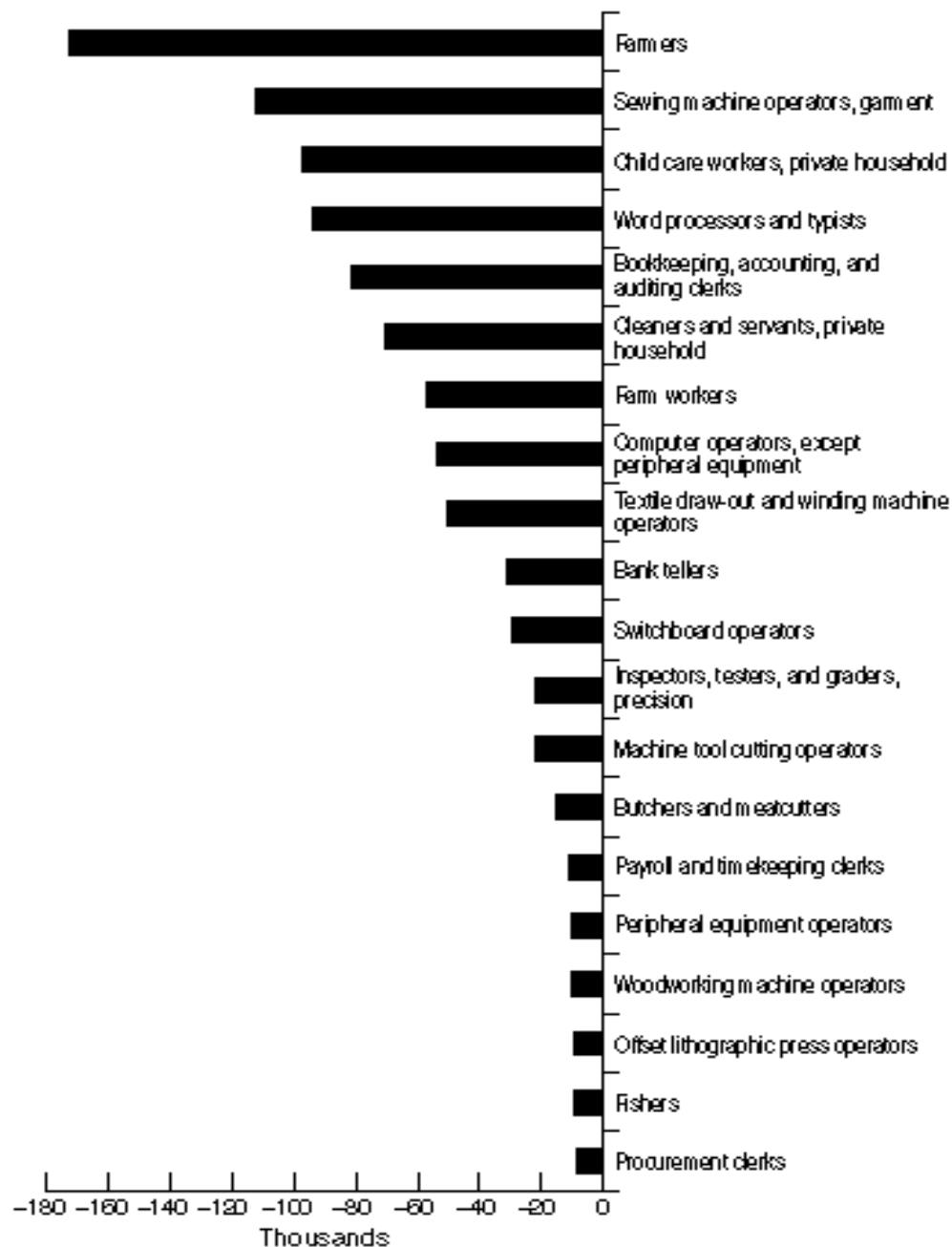
**Chart 9. Occupations projected to grow fastest, 1998-2008**







**Chart 10. Occupations with the largest numerical decrease in employment, projected 1998-2008**





# Wyoming (2000)

## New economy defined

- Competition is relentless
- Technology is here to stay
- Knowledge builds wealth
- People are the most important resource
- There is no such thing as a smooth ride
- Alliances and partnerships are the way
- The location still matters, but now business comes to the worker, not vice versa



# Delaware

“.. like the recommendation to create a special technology court to attract high-tech companies to Delaware. But I am especially pleased by its focus on biotechnology...”



# Florida

“...Chief among the new industries that will transform Florida are those that create high-tech jobs, from Florida's globally-recognized strengths such as the simulation, optics, and space technology fields to emerging new sectors such as biotechnology, nanotechnology, and artificial intelligence.”

“That is why this session I propose that we dedicate \$100 million to create the Florida Technology Development Initiative.”

“And they in turn will help build businesses that will fuel our economy for the next century...”





# Hawaii

“Hawaii companies are developing national and international markets through their unique products and use of new technology, including the Internet.”

”And there are indications that Hawaii’s economy is diversifying, reducing our dependence on tourism. Between 1996 and 2000, for example, the number of high tech jobs increased by 23 percent, while jobs as a whole increased less than 4 percent ...”



# Idaho

“..We've told businesses that if you'll bring high tech capabilities like broadband to our rural areas, we'll make it worth your while.”

“In fact, our Broadband Investment Tax Credit has made it feasible for one group of telephone companies - Syringa Networks - to proceed with their \$35 million, 1,400-mile fiber-optic network connecting all of Southern Idaho...”

”We are ahead of the curve and the economic development tools that we've put into play are key factors that are persuading companies like Anheuser-Busch, Modelo, Micron, Dell, TSI, ML Technologies, and Syringa Networks to expand in Idaho. In a down economy, our tax structure not only allows businesses to survive, but thrive...”





# Michigan

“...Michigan is becoming the Technology State. More than \$2 billion of new buildings on our campuses, Automation Alley, Smart Parks, the Life Sciences Corridor - all reflect the exciting transformation under way. They also reflect our commitment to fostering the right environment to attract the best science and technology have to offer. new work opportunities have blossomed across our state, all due to our willingness to embrace technological change ...”

“Gartner estimates that a significantly greater deployment of broadband could mean a half million new jobs over baseline projections in the next decade, and an increase in state economic output by half a trillion dollars. Do we seriously want to turn our back on 500,000 new jobs? Or 250,000? Or even 100,000? I want those jobs, and I want those jobs in Michigan.”



# New Hampshire

“...We have come a long way in expanding access to the high-speed Internet connections that are as important to today's commerce as interstate highways. Per capita, we have more fiber-optic cable than any other New England state, including Massachusetts, and more than California or New York. Sixty-six percent of our citizens are connected to the Internet from their homes. We are among the top 10 states in the percentage of our companies doing business online.”



# Ohio

“ I propose the ‘Third Frontier Project.’ We'll invest \$1.6 billion over the next 10 years to build on our progress, provide better research facilities and create new centers of innovation.”



# Pennsylvania

“Perhaps more than any other single factor, technology will keep Pennsylvania competitive well into the 21st century. Since 1995, we’ve invested hundreds of millions of dollars to put the tools of technology into the hands of Pennsylvania families, businesses and service providers. And it's paying off big.”

“Ten years ago, Pennsylvania was still known for rivets and rust. Today, we’re a hot spot for technology, ranked in the Top 10 for high-tech jobs.”





## South Dakota

“There is not a state in the union that has a course for teachers, their classroom educators, that goes to 200 hours to learn how to utilize technology. Forty percent of all the classroom teachers in this state ... have been through that TTL course that has a minimum of 200 hours of instruction in how to utilize technology to enhance learning...”



# Utah

“Utah technologies have worldwide impact. But too often the innovation took place here and the jobs went someplace else. We will change that. If we are to emerge as a world technology player, people must know and understand the Utah brand. Our message to the world is that Utah has a young, growing workforce; well-educated, tech-savvy people; clean, safe communities; and stunning surroundings in which to work, play and raise families. We’ve already begun to market the phrase "Utah! Where ideas connect."

“Over a thousand days, we will organize more than a dozen economic ecosystems, a term we will make a Utah trademark. An economic ecosystem is essentially a cluster of related technologies where the elements necessary for prosperity - the ideas, research, capital, workforce and government support - exist in one place.”





# West Virginia

“...In 2001, for the first time, the number of trips visitors made to West Virginia topped 21 million. We ... developed a tourism database and website that is helping thousands of people find the exact vacation experience they are seeking, right here in wild, wonderful West Virginia...”



# Wyoming

“...The new economy is more than technology, but it needs technology in order to work effectively. Fewer than 25 percent of our businesses regularly use high-speed Internet as a routine part of their business, partly because of lack of awareness of what benefits it brings and partly due to lack of high-speed bandwidth. We need to increase our access to high-speed connectivity. I heard this loud and clear from people statewide in the communities I’ve recently visited.”



## Ohio (2000)

“The good unskilled jobs are vanishing. I have often said I have one of the last good unskilled jobs in Ohio.”



# The Framework

VISION

Workforce  
(Smart people)

Telecomm  
Infrastructure

Electronic  
Government

Policy

Innovate

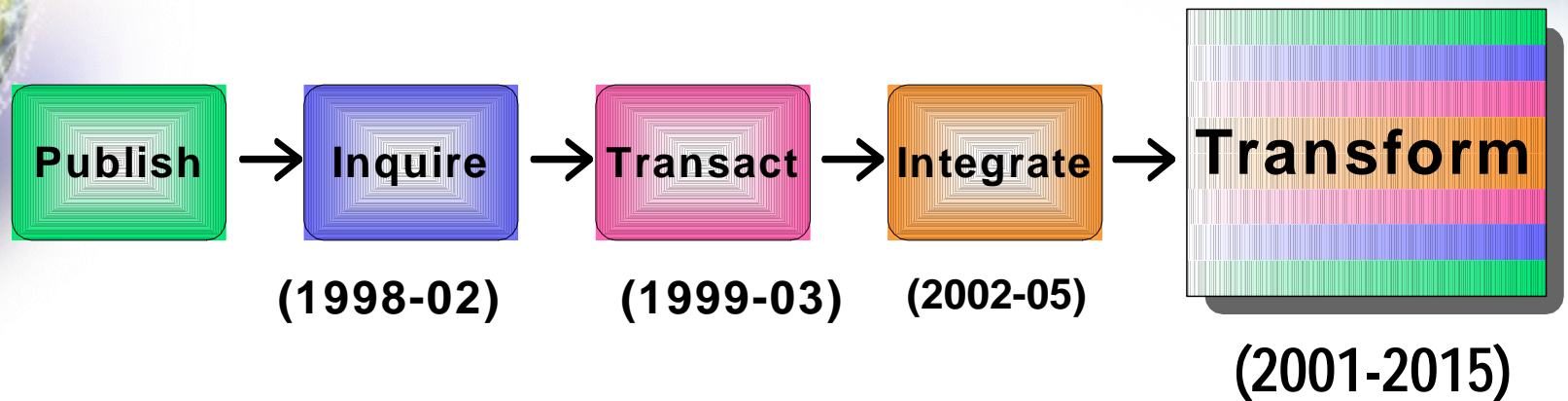
INVESTMENT





## 4 “Giga” Issues

# eGov Evolution



Transactional Applications

Integrated Applications

Vertical Portals





# Four “Giga” Issues

- Cost and customer expectations
- Managing as an Enterprise (Governance, Planning, Architecture)
- Trust and Security
- Commitment

# Cost

Shift from production work(er) to knowledge work

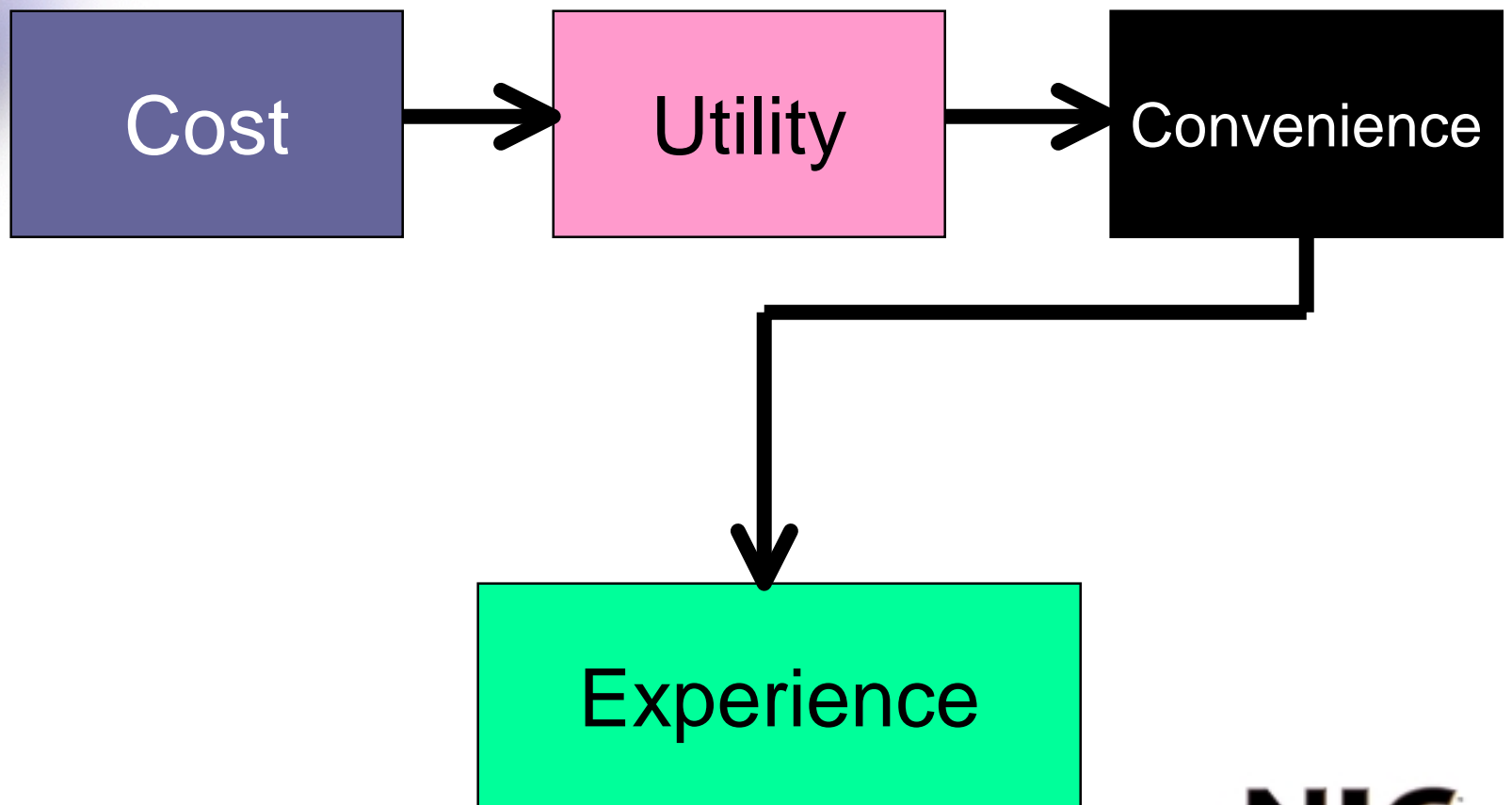
**2000**

**2004**

Knowledge work

Production work

# Customer Expectations





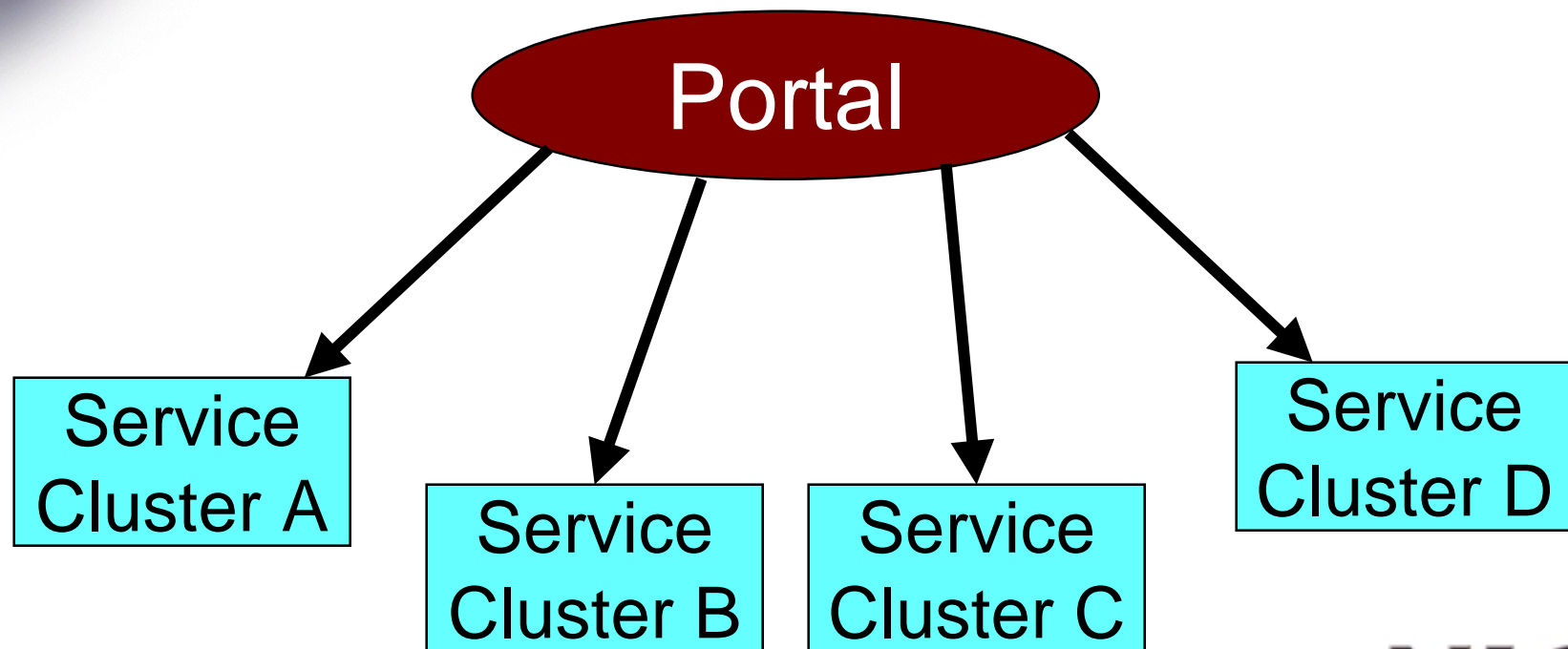
## Four “Giga” Issues

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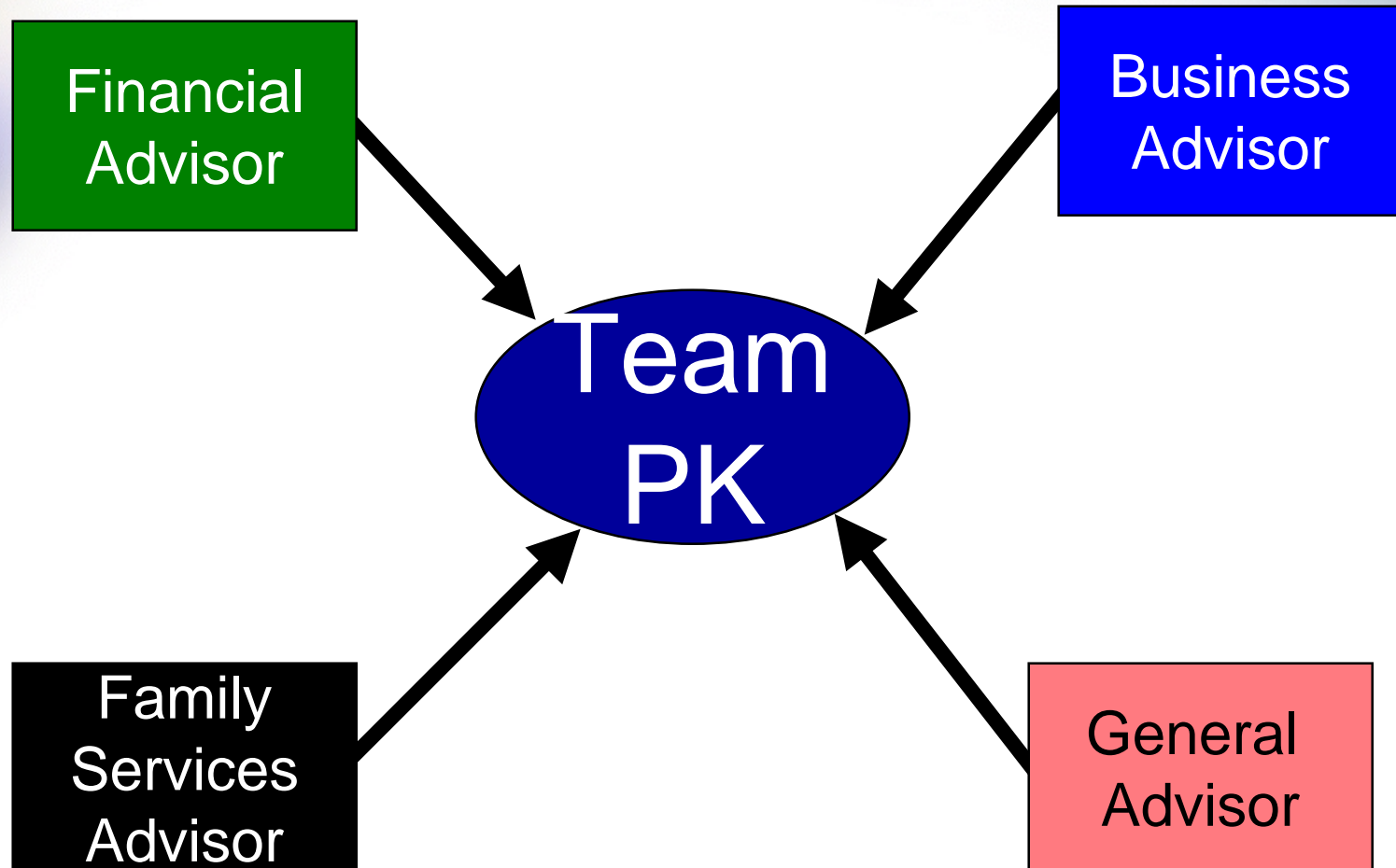


# Enterprise Thinking

At the 4th stage, govt' will have to functionally mirror the portal (eCRM)



# Enterprise Thinking



# PENNSYLVANIA OPEN FOR BUSINESS



**Resources:** Link to resources for business information.



**Structures:** Learn about business types and related forms.



**Incentives:** State programs and financing opportunities.



**Forms:** Download forms from our site.



**FAQs:** Find answers to frequently asked questions



**Your Briefcase:** Registered users login here.

Opening a  
business  
in Pennsylvania?



**Just need information?**

If you are looking for information on opening a business, we can help.

[Begin Here](#)







# eGovernment Architecture

Transactional Applications

Enterprise Standard Services

Enterprise Toolkit

Commercial Components

System Software

Hardware



# Application Architecture

## Delivery

PC, PDA, Mobile Phone, IVR, eMail, etc

## Applications

## 3<sup>rd</sup> Party Components

Workflow, Content Management, CRM, Personalization, Business Intelligence, Payment Server, Search, Accessibility, etc

## Infrastructure Components

Database, Email, Authentication, Directory Services, Web Server, App Server, FTP, XML, Middleware, etc

## Back End Systems



# Four “Giga” Issues

- Cost and customer expectations
- Managing as an Enterprise (Governance, Planning, Architecture)
- **Trust and Security**
- Commitment



# Trust

- Security
- Privacy
- Integrity
- Authentication
- Non-repudiation
- Recourse
- Intellectual Property\*

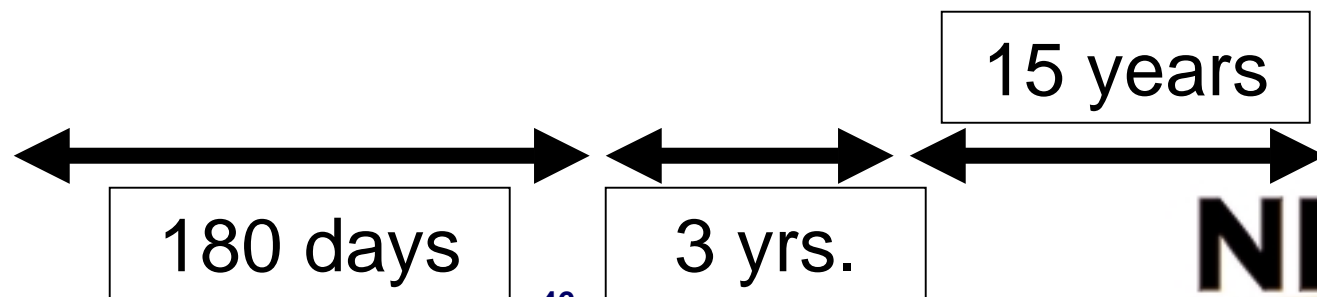
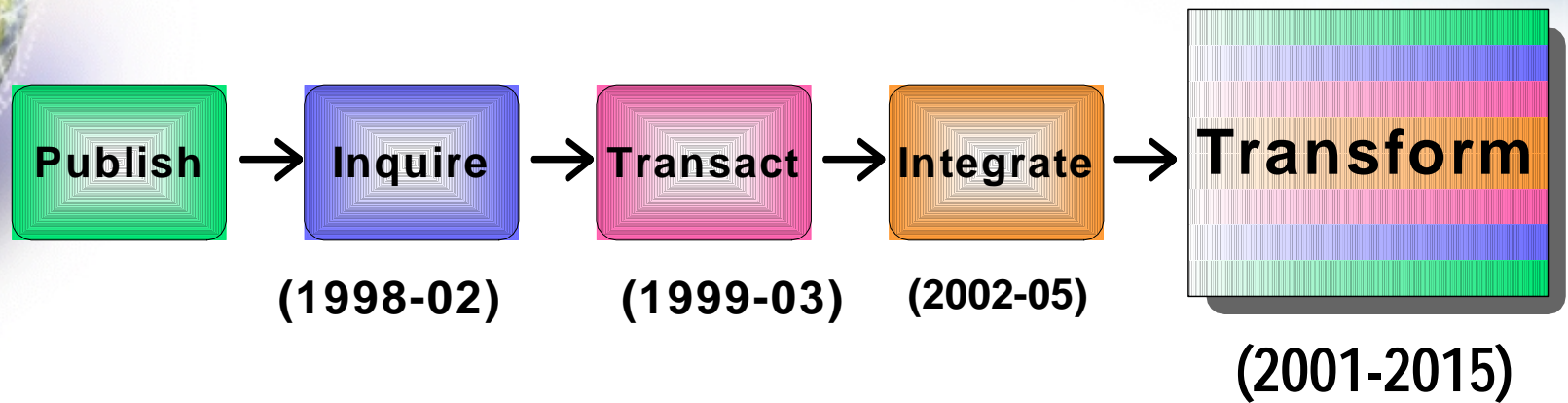




## Four “Giga” Issues

- Cost and customer expectations
- Managing as an Enterprise (Governance, Planning, Architecture)
- Trust and Security
- Commitment

# eGov Evolution





Let's go to the  
Races



## Information Society Index

Rank	Country	Score
1	Sweden	6496
2	Norway	6112
3	Finland	5953
4	United States	5850
5	Denmark	5837
6	United Kingdom	5662
7	Switzerland	5528
8	Australia	5382
9	Singapore	5269
10	Netherlands	5238





## eGovernment Maturity (2002)

Canada
Singapore
<b>United States</b>
Australia
Denmark
United Kingdom
Finland
Hong Kong
Germany
Ireland



## **New Economy Index – Overall**

Massachusetts
<b>California</b>
Maryland
Colorado
Washington
New Mexico
Texas
Utah
Connecticut
Delaware

Source: State New Economy Index, PPI



## Ranking(1999 - 2001)

Category	Rank	
	1999	2001
Economic Dynamism/Competition	2	5
Globalization	17	1
Knowledge Jobs	10	18
Technology Innovation	2	3
Transformation to Digital Economy	5	8
Overall	2	2



# Milken Institute New Economy Index

- Overall #2
  - BA degrees #8
  - Advanced degrees #10
  - Doctoral degrees #13
  - Exports #9
  - Fed R&D #8
  - Industry R&D #7
  - Academic R&D #14
  - SBIR Awards #8
  - Patents #8
  - Business starts # 6
  - VC Investments #2
  - IPO Proceeds #5





## Digital State Survey - 2001

1. Kansas(+1)
2. Illinois(+4)
3. Washington (-1)
4. Maryland (+5)
5. Arizona (+12)
6. Maine (+29)
7. New Jersey (-1)
....
....
<b>23. California (+19)</b>



## Other Races

- Brown University
  - Rank 18 (2000)
  - Rank 6 (2001), IN, MI, TX, TN, WA, **CA**
- Grading the States (Maxwell/Governing)
  - Overall C-, IT Grade C+ (1999)
  - Overall C+, IT Grade B- (2001)
- Best of the Web
  - Rank #1 (2001)
- Best States for eCommerce 2002 (Rank 46)



## **Call for Action**

- Catalyst for private sector
- Educational policy
- Foster new industries
- Bandwidth
- Continued thrust for Electronic Government
  - “My State”
  - G2B, G2C, G2E, G2G



# The Framework

VISION

Workforce  
(Smart people)

Telecomm  
Infrastructure

Electronic  
Government

Policy

Innovate

INVESTMENT





# The Fifth Dimension



# The End